IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No.:

10/820,416

Appellants:

Endler et al.

Filed:

April 7, 2004

Title:

METHODS AND APPARATUSES FOR MANAGING AND PRESENTING

CONTENT THROUGH A SPHERICAL

DISPLAY DEVICE

Examiner:

Basom, Blaine T.

Confirm. No.:

2173 7822

Certificate of Transmission

I hereby certify that this correspondence is being facesimale transmitted to the USPTO, transmitted via the Office determine filing system, or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Pattents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below:

__6-7-10 Date /ThomasFLebens38221/ Thomas F. Lebens

Registration No. 38,221 Attorney for Appellants

APPEAL BRIEF

Mail Stop: APPEAL BRIEF - PATENT Hon. Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Appellants submit this appeal brief under 37 C.F.R. § 41.37 appealing the final rejection of Claims 1, 2, 4-11, 26-28, 30, 32-35, 37-40 and 42-44 in the Final Office Action mailed January 12, 2010 and Advisory Action mailed April 5, 2010.

Page 2 of 37 Application. No. 10/820,416 Appeal Brief

(1) Real Parties in Interest

The real parties in interest are Sony Corporation and Sony Electronics Inc.

Page 3 of 37

Application. No. 10/820,416

Appeal Brief

(2) Related Appeals and Interferences

No related appeals or interferences are known to Appellants.

- 100

(3) Status of Claims

Claims 1-29 were submitted for examination in the application filed on April 7, 2004.

Claims 1, 4-11 and 26-27 were amended during prosecution.

Claims 30-44 were added during prosecution.

Claims 3, 12-25, 29, 31, 36 and 41 were canceled during prosecution.

Claims 1, 2, 4-11, 26-28, 30, 32-35, 37-40 and 42-44 were finally rejected in the January 12, 2010 final office action¹.

Claims 1, 2, 4-11, 26-28, 30, 32-35, 37-40 and 42-44 are appealed.

¹ Hereinafter referred to as "Office Action" or "Final Office Action"

Page 5 of 37 Application. No. 10/820,416 Appeal Brief

(4) Status of Amendments

No amendments have been filed subsequent to the final rejection mailed January 12, 2010.

Page 6 of 37

Application, No. 10/820,416

Appeal Brief

(5) Summary of Claimed Subject Matter

A concise explanation of this subject matter appears as follows (with corresponding references to the specification² by page and line number (or paragraph numbering where appropriate) and to the drawing(s) (if any) by figure number and reference characters.³

Independent Claims Subject Matter Map

Claim 1

displaying a first content on a flat display surface within a display	FIG. 1: 110; FIG. 7A-8C; pg. 6: ln. 16-17, 21-22; pg. 7: ln. 18-20; pg. 12: ln. 20-23; pg. 15: ln. 10; pg. 16: ln. 1-3, 12-20
capturing the first content with a content capturing device	FIG. 5: 510, 515; pg. 7: ln. 15-17; pg. 13: ln. 11- pg. 14: ln. 11
simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex	pg. 6: ln. 14-18; pg. 12: ln. 20-23; pg. 13: 1-3; pg. 16: ln. 1-3, 17-21; pg. 18: ln. 21-22
scrolling through one of the first content and the second content based on instructions while displaying the other one of the first content and the second content	Pg. 13: ln. 1-10; pg. 17: ln. 6-15; pg. 19: ln. 2-3
wherein the spherical display surface is imposed over the flat display surface such that the first content and the second content are distinctly and simultaneously viewed	FIG. 6A, 6B; pg. 16: 11-21

Claim 11

means for displaying a first content on a flat display surface within	FIG. 1: 110; FIG. 5, 6A,
a display	6B: 520; FIG. 9: 900,
	905, 910, 915; pg. 6: ln.
	16-17, 21-22; pg. 7; ln.

² Application as Filed.

³ Independent claim 13 includes a means-plus-function recitation; an identification of the corresponding structure in the specification is presented in this Independent Claims Subject Matter Map and Summary of Claimed Subject Matter. It will be understood that this summarization of the Claimed subject matter is, in fact, a "summary" and that Appellants do not represent or intend that this brief presentation, or the accompanying references to the drawings and the specification, comprises an exhaustive presentation in this regard. As always, the Claims are to be viewed and interpreted in view of the context of the entire specification and the Abstract.

Page 7 of 37

Application. No. 10/820,416 Appeal Brief

pro-	
	18-20; pg. 12: lns. 20-
	23; pg. 20: ln. 22-pg.
	22: ln. 4
means for capturing the first content	FIG. 1: 110; FIG. 5:
	500, 510, 515; FIG. 9:
	920; pg. 7: ln. 15-17;
	pg. 13: ln. 11-pg. 14: ln.
	13; pg. 21: ln. 1
means for simultaneously displaying a second content on an	FIG. 1: 110; FIG. 9:
outside surface of a physical spherical display surface of the	900, 905, 910, 915; pg.
display, wherein the spherical display surface is convex	6: ln. 16-17, 21-22; pg.
	7: ln. 18-20; pg. 20: ln.
	22-pg. 22: ln. 4
means for scrolling through one of the first content and the second	FIG. 5: 525, 530; pg.
content based on instructions while displaying the other one of the	19: ln. 2-3; pg. 17: ln.
first content and the second content	6-15
wherein the spherical display surface is imposed over the flat	FIG. 6A, 6B; pg. 12: ln.
display surface such that the first content and the second content	20-23; pg. 6: ln. 14-18;
are distinctly and simultaneously viewed	pg. 13: ln. 1-3; pg. 16:
	ln. 1-3, 17-21; pg. 18:
	21-22

Claim 26

a content capturing device for capturing first content	FIG. 1: 110; FIG. 5: 500, 510, 515; FIG. 9: 920; pg. 7: ln. 15-17; pg. 13: ln. 11-pg. 14: ln. 13; pg. 21: ln. 1
a physical spherical display for simultaneously displaying a video stream and menu information comprising a flat display surface and a convex physical spherical display surface, wherein the video stream is displayed on the flat display surface and the menu information is displayed on the outside surface of the convex spherical display surface	FIG. 6A-8C; pg. 15: ln. 7-pg. 16: ln. 21
a playback ring for scrolling through the menu information	FIG. 5, 6A, 7A, 7C, 7D, 8A: 530; pg. 13: 4-10; pg. 17: 6-15
a storage module to store the video stream and the menu information	FIG. 3: 330; pg. 10: ln. 6-15

The claimed embodiments are directed to methods and apparatuses for managing and presenting content through a spherical display device. FIGS. 6A, 6B and 9 from the application appear below for the convenience of the reader showing one or more exemplary apparatus for presenting content through a spherical display device according to some embodiments:

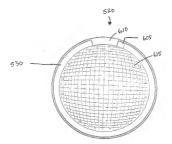
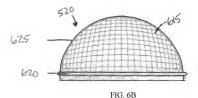
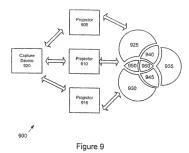


FIG. 6A





More specifically, some embodiments provide a method of presenting content. In one embodiment the method comprises displaying a first content on a flat display surface within a display and further comprises capturing the first content with a content capturing device. In one embodiment, the content capture device may be a video camera and/or a digital camera. In one embodiment the method further comprises simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display. In one embodiment, the spherical display surface is convex. In one embodiment, the physical spherical display may be configured to simultaneously display multiple video feeds. In a further embodiment, the physical spherical display is configured to apply special effects to a portion of the first content. In one or more embodiments, the special effects may comprise one or more of a sepia tone, black and white tone and/or slow shutter effect.

In one embodiment, the method may further comprise scrolling through one of the first content and the second content based on instructions while displaying the other one of the first content and the second content. In one embodiment, the instructions may be based on rotating a playback ring to scroll through one of the first content and second content. In an alternative or additional embodiment, the instructions may be based on rotating a knob to scroll through one of

Page 10 of 37 Application. No. 10/820,416 Appeal Brief

the first content and the second content. In some embodiments, the scrolling may further comprise controlling at least one of a direction and/or speed of a playback of one of the first content and the second content.

According to some embodiments, the first content and/or the second content may be one of a video stream or a digital image, or a combination thereof. In some embodiments, the other one of the first content or second content may comprise content menu information. In one embodiment, the first content and/or the second content may be stored in a storage device. According to one embodiment, the spherical display surface may be imposed over the flat display surface such that the first content and the second content are distinctly and simultaneously viewed. In one embodiment, the physical display surface may display the second content in a three dimensional viewpoint. In some embodiments, the display may be semi-spherically shaped. In one embodiment the spherical display surface substantially spans the semi-spherical shape of the spherical display and the flat display surface is coupled to the physical spherical display surface and spans a diameter of the physical spherical display surface.

Additional embodiments provide for a system comprising means for displaying a first content on a flat display surface within a display, means for capturing the first content, means for simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex and means for scrolling through one of the first content and the second content based on instructions while displaying the other one of the first content and the second content. In one embodiment, the spherical display surface is imposed over the flat display surface such that the first content and the second content are distinctly and simultaneously viewed.

Further embodiments may provide a device, comprising a content capturing device for capturing first content, a physical spherical display for simultaneously displaying a video stream and menu information comprising a flat display surface and a convex physical spherical display surface, wherein the video stream is displayed on the flat display surface and the menu information is displayed on the outside surface of the convex spherical display surface, a playback ring for scrolling through the menu information and a storage module to store the video stream and the menu information.

Page 11 of 37

Application. No. 10/820,416

Appeal Brief

(6) Grounds of Rejection to be Reviewed

The following issues are presented for review:

Issue 1: whether Claim 11 is patentable under 35 U.S.C. § 112, second paragraph.

Issue 2: whether Claims 1, 2, 6, 9, 10, 11, 30 and 35 are patentable under 35 U.S.C. § 103(a), in view of U.S. Patent No. 6,628,313 to Minakuchi et al. ("Minakuchi"), and U.S. Publication No. 2004/0001111 to Fitzmaurice et al. ("Fitzmaurice"), as supported by "Merriam Webster's Collegiate Dictionary," Tenth Edition ("Webster").

Issue 3: whether Claim 4 is patentable under 35 U.S.C. § 103(a), in view of Minakuchi, Fitzmaurice and Webster and in further view of U.S. Patent No. 7,107,516 to Anderson et al ("Anderson").

Issue 4: whether Claims 5, 32 and 37 are patentable under 35 U.S.C. § 103(a), in view of Minakuchi, Fitzmaurice, Webster and Anderson, in further view of PCT Publication No. WO 02-21529 to Barbieri ("Barbieri").

Issue 5: whether Claims 7-8 are patentable under 35 U.S.C. § 103(a), in view of Minakuchi, Fitzmaurice and Webster and in further view of U.S. Publication No. 2002-0030665 to Ano ("Ano").

Issue 6: whether Claims 33 and 38 are patentable under 35 U.S.C. § 103(a), in view of Minakuchi, Fitzmaurice, Webster, Anderson, Barbieri and in further view of U.S. Publication No. 2004-0264579 to Bhatia et al ("Bhatia").

Issue 7: whether Claims 34 and 39 are patentable under 35 U.S.C. § 103(a), in view of Minakuchi, Fitzmaurice, Webster and Anderson and Barbieri and in further view of U.S. Publication No. 2003-0146915 to Brook et al ("Brook").

Issue 8: whether Claims 26-28, 40 and 42 are patentable under 35 U.S.C. § 103(a), in view of Minakuchi, Fitzmaurice, Webster, Anderson and Barbieri and in further view Ano.

Issue 9: whether Claim 43 is patentable under 35 U.S.C. § 103(a), in view of Minakuchi, Fitzmaurice, Webster, Anderson, Barbieri and Ano and in further view of Bhatia.

Issue 10: whether Claim 44 is patentable under 35 U.S.C. § 103(a), in view of Minakuchi, Fitzmaurice, Webster, Anderson, Barbieri and Ano and in further view of Brook. Page 12 of 37 Application. No. 10/820,416 Appeal Brief

(7) Argument

The following arguments are presented to contest the grounds for rejection presented above.

Issue 1: Claim 11 is patentable under 35 U.S.C. § 112, second paragraph.

Claim 11 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellants regard as the invention. Appellants respectfully traverse this rejection and submit that claim 11 is patentable under 35 U.S.C. § 112.

Specifically, in the Final Office Action, the Examiner states that the Appellants' specification fails to clearly link or associate the disclosed structure, material or act of the limitations of claim 11 reciting "means for displaying ...," "means for simultaneously displaying...," and "means for scrolling...," to the claimed functions such that one of ordinary skill in the art would recognize what structure, material or acts perform the claimed function (Office Action, page 2). Appellants respectfully submit that the specification clearly provides sufficient description linking the limitations to sufficient structure, which performs the functions.

Appellants submit that the specification specifically recites "electronic device 110 is a display device such as a screen, a monitor, a projector, and the like. The display device is utilized to display the content to at least one viewer" (Specification as Filed, pg. 7: ln. 17-20). For example, in one embodiment, FIG. 9 of the present application illustrates a system 900 for displaying content having projectors 905, 910 and 920. The projectors 905, 910 and 915 are configured to display content by projecting the content onto a surface.

Furthermore, in another embodiment, the client device 110 may comprise a device having "a spherical display 520" and a "playback ring 530" and "control knob 525" (see Specification as Filed, pg. 12, ln. 19-23). The specification specifically recites that "the spherical display 520 is configured to simultaneously display video/image content and functional menu driven content. In one embodiment, the spherical display 520 is configured to simultaneously display multiple video feeds." Furthermore, the specification recites, "The control knob 525 adjusts and controls the content and menu of the spherical display 520 in a vertical direction" and "the playback ring 530 rotates in both directions" (see Published Application, para. 0046, 0047, 0048).

Page 13 of 37

Application. No. 10/820,416

Appeal Brief

In response to similar arguments presented in the response to the Final Office Action, in the Advisory Action mailed April 5, 2010, the Examiner states:

"[I]n addition to the spherical display, playback ring, and control knob, the specification also describes other items which could constitute the 'means for displaying...' etc. recited in claim 1. For example, the specification also describes a 'rendering module 310' that 'produces signals that present content to a viewer' (Published Application No. 2005/0001920, paragraph 0031), and which therefore also appears to be a 'means for displaying...' like claimed."

According to this reasoning the Examiner maintains that the specification fails to clearly link or associate the limitations of claim 11 reciting "means for displaying...," "means for simultaneously displaying...," and "means for scrolling..." to the claimed functions such that one of ordinary skill in the art would recognize what structure, material or acts perform the claimed function (Advisory Action, pg. 2).

Appellants respectfully disagree with the Examiner's assertion and state that the specification clearly links and associated the limitations of claim 11 to the claimed functions such that one of ordinary skill in the art would recognize what structure, material or acts perform the claimed function. Initially Appellants submit that the Examiner has only provided support for maintaining his rejection of claim 11 based on the limitation "means for displaying..." No reasons are provided by the Examiner for the maintenance of his rejection of the limitation "means for scrolling..." and none appear to the Applicant.

Further, with respect to the reasons provided for maintaining the rejection based on the limitation "means for displaying..." and "means for simultaneously displaying..." Appellants submit that the specification clearly sets out the means for displaying the content on the spherical display. The "rendering module 310" is one of the modules of the system 300, which may be embodied within the electronic device 110 (Specification as Filed, pg. 9: Ins. 4-11). The "rendering module 310 produces signals that present content to a viewer. In one embodiment, the signals represent content such as audio data, image data, and a combination of audio/video data" (pg. 9, Ins. 19-21). As stated above, the means for displaying comprise a display device such as the display device 520 or alternative embodiments such as a screen, a monitor, a projector and the like, collectively referred to as the client device 110 (Specification as Filed, pg. 7: Ins. 17-20 and pg. 12:

Page 14 of 37

Application. No. 10/820,416

Appeal Brief

Ins. 19-23). The rendering module 310 is one of the modules that may be utilized by the client device 110, i.e. means for displaying and means for simultaneously displaying, according to one or more embodiments (see Specification as Filed, pg. 9, lns. 9-11 and 19-21). As such, Appellants submit that the specification is clear on the device that provides the "means for displaying..." and "means for simultaneously displaying..." as recited in claim 11.

As such, Appellants respectfully submit that Appellants' specification clearly links or associates the disclosed structure, material or act of the limitations of claim 11 reciting "means for displaying ...," "means for simultaneously displaying...," and "means for scrolling...," to the claimed functions such that one of ordinary skill in the art would recognize what structure, material or acts perform the claimed function. As such, Appellants respectfully request that the rejection to claim 11 be withdrawn.

Issue 2: Claims 1, 2, 6, 9, 10, 11, 30 and 35 are patentable under 35 U.S.C. § 103(a)

Claims 1, 2, 6, 9, 10, 11, 30 and 35 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over Minakuchi, Fitzmaurice, as supported by Webster. Appellants respectfully traverse this rejection and submit that the above-cited combination fails to describe or suggest each limitation as recited in claims 1, 2, 6, 9, 10, 11, 30 and 35.

Claim 1

Claim 1 is rejected as being unpatentable over Minakuchi and Fitzmaurice as supported by Webster. Appellants respectfully submit that this combination fails to describe or suggest each limitation as recited in independent Claim 1.

Specifically, Claim 1 recites:

A method comprising:

displaying a first content on a flat display surface within a display;

capturing the first content with a content capturing device;

simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex; and

scrolling through one of the first content and the second content based on instructions while displaying the other one of the first content and the second content;

Page 15 of 37

Application. No. 10/820,416

Appeal Brief

wherein the spherical display surface is imposed over the flat display surface such that the first content and the second content are distinctly and simultaneously viewed.

The Minakuchi and Fitzmaurice combination fails to describe or suggest "simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex."

The Examiner submits that above-cited combination fails to describe or suggest this limitation and instead relies on Fitzmaurice as describing this limitation (Office Action, pg. 7). However, Fitzmaurice also fails to describe or suggest this limitation. Instead, Fitzmaurice describes a "volumetric display" allowing the user "to have a true three-dimensional view of a scene" (see at least Fitzmaurice, para. 0024). Both the scene and the widgets of Fitzmaurice are displayed "inside the enclosure" and "within a volumetric display" (see for example, paras. 0027-0028).

The volumetric display of the Fitzmaurice comprises a display apparatus 54 that will produce a 3D holographic display. The "volumetric display is comprised of voxels or volume pixels," e.g. voxels 94-120 illustrated in FIG. 6B of Fitzmaurice. Fitzmaurice discloses that the top level voxels or surface voxels are used for displaying widgets "on the outside surface of the display inside the enclosure," while other voxels are used to display the scene (Fitzmaurice, [0027]). As such, both the widgets and the scene 12 are displayed using the same set of voxels and accordingly on the same display, "within the volumetric display," wherein the volumetric display does not comprise a physical spherical display, and further does not describe or suggest displaying a second content on an outside surface of a physical spherical display surface of the display" (see Fitzmaurice, [0024]-[0027]).

The Examiner in asserting that Fitzmaurice describes this limitation cites to paras. 0012-0014, 0025, 0027 and FIG. 2 (Final Office Action, pg. 7). Appellants respectfully submit that neither of the cited portions describes "displaying a second content on an outside surface of a physical spherical display surface of the display." Instead, with respect to FIG. 2, Fitzmaurice specifically states, "plac[ing] the 2D widgets 30 and 32 on the inside surface of the volumetric display enclosure 34," and paragraphs 0010 and 0011 both state positioning widgets "within a volumetric display" and "in a volumetric display." The volumetric display enclosure 34 is not a display surface and instead "a protective enclosure" (see para, 0012).

Page 16 of 37 Application. No. 10/820,416 Appeal Brief

In response to Appellants' arguments that Fitzmaurice fails to describe or suggest this limitation (presented in response to the Office Action mailed April 13, 2009), in the Final Office Action the Examiner asserted that Fitzmaurice describes this limitation because the reference discloses that "widgets are placed on the shell or outer edge of a volumetric display" and further discloses "surface voxels that might be used for part of a 2D widget displayed on the outside surface of the display inside the enclosure" (Office Action, pages 22 and 23).

Appellants submit that these portions fail to describe or suggest what is recited in Appellants' claim 1. That is, Appellants' claim 1 specifically recites "a physical spherical display surface". On the other hand, as described above, Fitzmaurice describes a single volumetric display comprising a plurality of voxels place in layers, and the top layer voxels are used to display widgets, while others are used to display the scene 12 (see [0027] and FIGS. 6A and 6B). For example, in FIG. 6B, voxels 102, 104, 108, 110, 112, 114, 116 and 118 "are surface voxels that might be used for part of a 2D widget displayed" (see Fitzmaurice, [0027] and FIGS. 6A and 6B). Fitzmaurice explicitly states that a single volumetric display is used to display both the widgets and scenes. This is different than Appellants recited claim of "displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex".

Appellants presented arguments similar to the above arguments in response to the Final Office Action. In the Advisory Action mailed April 5, 2010 the Examiner responded to these arguments stating that the arguments are not persuasive. In support the Examiner stated:

"[the] specification of the instant application does not explicitly disclose 'displaying a second content on an outside surface of the physical spherical display surface,' and in fact discloses 'simultaneously display[ing] a second content on a spherical display surface within the spherical display' (Abstract). Just as the specification though would nevertheless support a teaching of 'simultaneously displaying a second content on an outside surface of a physical spherical display surface,' so to [sic] would Fitzmaurice's disclosure that '[i]t is an aspect of the present invention to place the widgets on an outside surface of a volumetric display inside a protective enclosure' (paragraph 0012). The volumetric display described by Fitzmaurice can be considered a physical spherical display."

Appellants respectfully disagree with the Examiner's reasons for maintaining the rejection of Claim

1. Initially, Appellants respectfully submit that the present application does in fact disclose "displaying a second content on an outside surface of a physical spherical display surface". While

Page 17 of 37

Application. No. 10/820,416

Appeal Brief

the Abstract does recite what is cited by the Examiner, the specification clearly describes several embodiments and further expands on different methods and embodiments for managing and presenting content through a spherical display device. For example, the specification specifically recites, "[t]he display area 615 includes a spherical display surface 625 and a flat display surface 620," which are both illustrated in FIG. 6A and 6B included herein for convenience (see Specification as Filed, pg. 16: Ins. 5-21). Furthermore, FIGS. 7A-7D and 8A-8D illustrates different embodiments of the spherical display device, and clearly demonstrate "displaying a second content on an outside surface of a physical spherical display surface".

Furthermore, Appellants assert that the Examiner's assertion that Fitzmaurice's disclosure that "[i]t is an aspect of the present invention to place the widgets on an outside surface of a volumetric display inside a protective enclosure" supports "simultaneously displaying a second content on a outside surface of a physical spherical display surface" as recited in claim 1, is in error. As evidenced by the reasons set out above, Fitzmaurice does not describe "displaying a first content on a flat display surface within a display and simultaneously displaying a second content on a outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex".

Instead, Fitzmaurice discloses a display apparatus 54 that will produce a 3D holographic display. The "volumetric display is comprised of voxels or volume pixels," e.g. voxels 94-120 illustrated in FIG. 6B of Fitzmaurice. Fitzmaurice discloses that the top level voxels or surface voxels are used for displaying widgets "on the outside surface of the display inside the enclosure," while other voxels are used to display the scene (Fitzmaurice, [0027]). As such, both the widgets and the scene 12 are displayed using the same set of voxels and accordingly on the same display, "within the volumetric display," wherein the volumetric display does not comprise a physical spherical display, and further does not describe or suggest displaying a second content on an outside surface of a physical spherical display surface of the display" (see Fitzmaurice, [0024]-[0027]). Furthermore, Appellants submit that regardless of what is recited in the present application or may be supported by the specification of the present application, Fitzmaurice clearly does not describe or suggest what is recited in claim 1, and as such fails to render claim 1 obvious. Therefore, Appellants respectfully submit that the Examiner's reasons for maintaining the rejection of claim 1 in view of

Page 18 of 37 Application. No. 10/820,416 Appeal Brief

Fitzmaurice are in error.

For the reasons described above, Fitzmaurice fails to describe or suggest "simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex" as recited in claim 1.

Furthermore, Webster also fails to describe or suggest "displaying a first content on a flat display surface within a display" and "simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex." As such, the above cited combination fails to render claim 1 obvious, and thus, Appellants respectfully request that the rejections to claim 1 be withdrawn.

Claim 11

Claim 11 is rejected as being unpatentable over Minakuchi, Fitzmaurice as supported by Webster. Appellants respectfully submit that this combination fails to describe or suggest each limitation as recited in independent Claim 11.

Appellants initially note that Claim 11 is rejected under the same reasoning as Claim 1, therefore the Examiner's response to the arguments presented with respect to Claim 1 are assumed to apply to Claim 11 similarly.

Appellants' Claim 11 recites:

A system comprising:

means for displaying a first content on a flat display surface within a display;

means for capturing the first content;

means for simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex; and

means for scrolling through one of the first content and the second content based on instructions while displaying the other one of the first content and the second content.

wherein the spherical display surface is imposed over the flat display surface such that the first content and the second content are distinctly and simultaneously viewed.

The Minakuchi and Fitzmaurice combination fails to describe or suggest "means for simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex." The Examiner submits that Minakuchi fails to describe or suggest this limitation and instead relies on Fitzmaurice as describing this

Page 19 of 37 Application, No. 10/820,416 Appeal Brief

limitation (Office Action, pg. 7).

However, Fitzmaurice also fails to describe or suggest this limitation. Instead, Fitzmaurice describes a "volumetric display" allowing the user "to have a true three-dimensional view of a scene" (see at least Fitzmaurice, para. 0024). Both the scene and the widgets of Fitzmaurice are displayed "inside the enclosure" and "within a volumetric display" (see for example, paras. 0027-0028).

The volumetric display of the Fitzmaurice comprises a display apparatus 54 that will produce a 3D holographic display. The "volumetric display is comprised of voxels or volume pixels," e.g. voxels 94-120 illustrated in FIG. 6B of Fitzmaurice. Fitzmaurice discloses that the top level voxels or surface voxels are used for displaying widgets "on the outside surface of the display inside the enclosure," while other voxels are used to display the scene (Fitzmaurice, [0027]). As such, both the widgets and the scene 12 are displayed using the same set of voxels and accordingly on the same display, "within the volumetric display," wherein the volumetric display does not comprise a physical spherical display, and further does not describe or suggest "means for simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display" (see Fitzmaurice, [0024]-[0027]).

The Examiner in asserting that Fitzmaurice describes this limitation cites to paras. 0012-0014, 0025, 0027 and FIG. 2 of Fitzmaurice (Final Office Action, pg. 7). Appellants respectfully submit that neither of the cited portions describes "means for simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display." Instead, with respect to FIG. 2, Fitzmaurice specifically states "plac[ing] the 2D widgets 30 and 32 on the inside surface of the volumetric display enclosure 34," and paragraphs 0010 and 0011 both state positioning widgets "within a volumetric display" and "in a volumetric display." The volumetric display enclosure 34 is not a display surface and instead "a protective enclosure" (see para. 0012).

In response to Appellants' arguments that Fitzmaurice fails to describe or suggest this limitation (presented in response to the Office Action mailed April 13, 2009), in the Final Office Action the Examiner asserted that Fitzmaurice describes this limitation because the reference discloses that "widgets are placed on the shell or outer edge of a volumetric display" and further discloses "surface voxels that might be used for part of a 2D widget displayed on the outside surface of the display inside the enclosure" (Office Action, pages 22 and 23). Appellants submit that these

Page 20 of 37 Application. No. 10/820,416 Appeal Brief

portions fail to describe or suggest what is recited in Appellants' claim 11.

Appellants' claim 11 specifically recites "a physical spherical display surface". On the other hand, as described above, Fitzmaurice describes a single volumetric display comprising a plurality of voxels place in layers, and the top layer voxels are used to display widgets, while others are used to display the scene 12 (see [0027] and FIGS. 6A and 6B). For example, in FIG. 6B, voxels 102, 104, 108, 110, 112, 114, 116 and 118 "are surface voxels that might be used for part of a 2D widget displayed" (see Fitzmaurice, [0027] and FIGS. 6A and 6B). Fitzmaurice explicitly states that a single volumetric display is used to display both the widgets and scenes using a single display having a set of voxels. This is different than Appellants recited claim of "means for simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex".

Appellants presented arguments similar to the above arguments in response to the Final Office Action. In the Advisory Action mailed April 5, 2010 the Examiner responded to these arguments stating that the arguments are not persuasive.

Appellants initially note that the Advisory Action only addresses Claim 1. No reasons are provided for maintaining the rejection of Claim 11. However, Appellants provide the following arguments in the case that similar arguments as to Claim 1 may be provided with respect to Claim 11. In support of maintaining his rejection of Claim 1 the Examiner stated:

"[the] specification of the instant application does not explicitly disclose 'displaying a second content on an outside surface of the physical spherical display surface,' and in fact discloses 'simultaneously display[ing] a second content on a spherical display surface within the spherical display' (Abstract). Just as the specification though would nevertheless support a teaching of 'simultaneously displaying a second content on an outside surface of a physical spherical display surface,' so to [sic] would Fitzmaurice's disclosure that '[i]t is an aspect of the present invention to place the widgets on an outside surface of a volumetric display inside a protective enclosure' (paragraph 0012). The volumetric display described by Fitzmaurice can be considered a physical spherical display."

Appellants respectfully disagree with the Examiner's reasons as support for maintaining the rejection of Claim 1 and further disagree with these reasons as supporting the maintaining of the rejection of independent Claim 11.

First, Appellants respectfully submit that the present application does in fact disclose "means

Page 21 of 37

Application. No. 10/820,416

Appeal Brief

for simultaneously displaying a second content on an outside surface of a physical spherical display surface". While the Abstract does recite what is cited by the Examiner, the specification clearly describes several embodiments and further expands on different methods and embodiments for managing and presenting content through a spherical display device. For example, the specification specifically recites, "[t]he display area 615 includes a spherical display surface 625 and a flat display surface 620," which are both illustrated in FIG. 6A and 6B included herein for convenience (see Specification as Filed, pg. 16: Ins. 5-21). Furthermore, FIGS. 7A-7D and 8A-8D illustrates different embodiments of the spherical display device, and clearly demonstrate "displaying a second content on an outside surface of a physical spherical display surface".

Furthermore, Appellants assert that the Examiner's assertion that Fitzmaurice's disclosure that "[i]t is an aspect of the present invention to place the widgets on an outside surface of a volumetric display inside a protective enclosure" supports "means for simultaneously displaying a second content on a outside surface of a physical spherical display surface" as recited in claim 11, is in error. That is, as evidenced by the reasons set out above, Fitzmaurice does not describe "means for displaying a first content on a flat display surface within a display" and "means for simultaneously displaying a second content on a outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex".

Instead, Fitzmaurice discloses a display apparatus 54 that will produce a 3D holographic display. The "volumetric display is comprised of voxels or volume pixels," e.g. voxels 94-120 illustrated in FIG. 6B of Fitzmaurice. Fitzmaurice discloses that the top level voxels or surface voxels are used for displaying widgets "on the outside surface of the display inside the enclosure," while other voxels are used to display the scene (Fitzmaurice, [0027]). As such, both the widgets and the scene 12 are displayed using the same set of voxels and accordingly on the same display, "within the volumetric display," wherein the volumetric display does not comprise a physical spherical display, and further does not describe or suggest displaying a second content on an outside surface of a physical spherical display surface of the display" (see Fitzmaurice, [0024]-[0027]). Furthermore, Appellants submit that regardless of what is recited in the present application or may be supported by the specification of the present application, Fitzmaurice clearly does not describe or suggest what is recited in claim 11, and as such fails to render claim 11 obvious. Therefore,

Page 22 of 37

Application. No. 10/820,416

Appeal Brief

Appellants respectfully submit that the Examiner's reasons for maintaining the rejection of claim 11

in view of Fitzmaurice are in error.

For the reasons described above, Fitzmaurice fails to describe or suggest "simultaneously displaying a second content on an outside surface of a physical spherical display surface of the

display, wherein the spherical display surface is convex" as recited in claim 11.

Furthermore, Webster also fails to describe or suggest "displaying a first content on a flat

display surface within a display" and "simultaneously displaying a second content on an outside

surface of a physical spherical display surface of the display, wherein the spherical display surface is

convex." As such, the above cited combination fails to render claim 11 obvious, and thus,

Appellants respectfully request that the rejections to claim 11 be withdrawn.

Claims 2, 6, 9, 10, 30 and 35

The remaining Claims 2, 6, 9, 10, 30 and 35 are dependent claims that ultimately depend

upon independent Claims 1 and 11. Although other significant points of distinction may be found therein, for the purposes of this appeal the Appellants are content to rely only upon the points raised

above.

Issue 3: Claim 4 is patentable under 35 U.S.C. § 103(a)

Claim 4 stands rejected under 35 U.S.C. § 103(a), as being unpatentable over Minakuchi.

Fitzmaurice and Webster and in further view of Anderson. Appellants respectfully traverse this

rejection and submit that the above-cited combination fails to describe or suggest each limitation as

recited in Claim 4.

Claim 4 is a dependent claim that ultimately depends upon independent Claim 1. Although

other significant points of distinction may be found therein, again, for the purposes of this appeal the

Appellants are content to rely only upon the points raised above with respect to Claim 1.

Issue 4: Claims 5, 32 and 37 are patentable under 35 U.S.C. § 103(a)

Claim 5 stands rejected under 35 U.S.C. § 103(a), as being unpatentable over Minakuchi,

Fitzmaurice, Webster and Anderson, in further view Barbieri. Appellants respectfully traverse this rejection and submit that the above-cited combination fails to describe or suggest each limitation as

recited in claims 5, 32 and 37.

Claims 5, 32 and 37 are dependent claims that ultimately depend upon independent Claims 1

and 11. Although other significant points of distinction may be found therein, again, for the purposes of this appeal the Appellants are content to rely only upon the points raised above with

respect to Claims 1 and 11.

Issue 5: Claims 7-8 are patentable under 35 U.S.C. § 103(a)

Claims 7-8 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over over

Minakuchi, Fitzmaurice and Webster and in further view of Ano. Appellants respectfully traverse this rejection and submit that the above-cited combination fails to describe or suggest each limitation

as recited in claims 7 and 8.

Claims 7 and 8 are dependent claims that ultimately depend upon independent Claim 1.

Although other significant points of distinction may be found therein, again, for the purposes of this

appeal the Appellants are content to rely only upon the points raised above with respect to Claim 1.

Issue 6: Claims 33 and 38 are patentable under 35 U.S.C. § 103(a)

Claims 33 and 38 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over

Minakuchi, Fitzmaurice, Webster, Anderson and Barbieri and in further view of Bhatia. Appellants

respectfully traverse this rejection and submit that the above-cited combination fails to describe or

suggest each limitation as recited in claims 33 and 38.

Claims 33 and 38 are dependent claims that ultimately depend upon independent Claims 1

and 11. Although other significant points of distinction may be found therein, again, for the

purposes of this appeal the Appellants are content to rely only upon the points raised above with

respect to Claims 1 and 11.

Issue 7: Claims 34 and 39 are patentable under 35 U.S.C. § 103(a)

Page 24 of 37

Application. No. 10/820,416

Appeal Brief

Claims 34 and 39 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over over Minakuchi, Fitzmaurice, Webster and Anderson and Barbieri and in further view of Brook. Appellants respectfully traverse this rejection and submit that the above-cited combination fails to describe or suggest each limitation as recited in claims 34 and 39.

Claims 34 and 39 are dependent claims that ultimately depend upon independent Claims 1 and 11. Although other significant points of distinction may be found therein, again, for the purposes of this appeal the Appellants are content to rely only upon the points raised above with respect to Claims 1 and 11.

Issue 8: Claims 26-28, 40 and 42 are patentable under 35 U.S.C. § 103(a)

Claims 26-28 and 40 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over over Minakuchi, Fitzmaurice, Webster, Anderson and Barbieri and in further view Ano. Appellants respectfully traverse this rejection and submit that the above-cited combination fails to describe or suggest each limitation as recited in claims 26-28, 40 and 42.

Claim 26

Claim 26 is rejected as being unpatentable over Minakuchi, Fitzmaurice as supported by Webster and further in view of Barbieri, Anderson and Ano. Appellants respectfully submit that this combination fails to describe or suggest each limitation as recited in independent Claim 26.

Specifically, Claim 26 recites:

A device, comprising:

a content capturing device for capturing first content;

a physical spherical display for simultaneously displaying a video stream and menu information comprising a flat display surface and a convex physical spherical display surface, wherein the video stream is displayed on the flat display surface and the menu information is displayed on the outside surface of the convex spherical display surface;

a playback ring for scrolling through the menu information; and

a storage module to store the video stream and the menu information.

The above-cited combination fails to describe or suggest "a physical spherical display for simultaneously displaying a video stream and menu information comprising a flat display surface and a convex physical spherical display surface, wherein the video stream is displayed on the flat

Page 25 of 37

Application. No. 10/820,416

Appeal Brief

display surface and the menu information is displayed on the outside surface of the convex spherical display surface." The Examiner assets that Fitzmaurice teaches "a physical spherical display" as recited in Claim 26 (Office Action, pg. 14).

However, Appellants respectfully submit that Fitzmaurice fails to describe or suggest this limitation. Instead, Fitzmaurice describes a "volumetric display" allowing the user "to have a true three-dimensional view of a scene" (see at least Fitzmaurice, para. 0024). Both the scene and the widgets of Fitzmaurice are displayed "inside the enclosure" and "within a volumetric display" comprising a single 3D holographic display generating a set of voxels (see for example, paras. 0027-0028).

The volumetric display of the Fitzmaurice comprises a display apparatus 54 that will produce a 3D holographic display. The "volumetric display is comprised of voxels or volume pixels," e.g. voxels 94-120 illustrated in FIG. 6B of Fitzmaurice. Fitzmaurice discloses that the top level voxels or surface voxels are used for displaying widgets "on the outside surface of the display inside the enclosure," while other voxels are used to display the scene (Fitzmaurice, [0027]). As such, both the widgets and the scene 12 are displayed using the same set of voxels and accordingly on the same display, "within the volumetric display," wherein the volumetric display does not comprise a physical spherical display, and further does not describe or suggest that "the menu information is displayed on the outside surface of the convex spherical display surface" (see Fitzmaurice, [0024]-[0027]).

The Examiner in asserting that Fitzmaurice describes this limitation cites to paras. 0012-0014, 0025, 0027 and FIG. 2 (Final Office Action, pg. 7). Appellants respectfully submit that neither of the cited portions describes "a physical spherical display for simultaneously displaying a video stream and menu information comprising a flat display surface and a convex physical spherical display surface, wherein the video stream is displayed on the flat display surface and the menu information is displayed on the outside surface of the convex spherical display surface." Instead, with respect to FIG. 2, Fitzmaurice specifically states "plac[ing] the 2D widgets 30 and 32 on the inside surface of the volumetric display enclosure 34," and paragraphs 0010 and 0011 both state positioning widgets "within a volumetric display" and "in a volumetric display." The volumetric display enclosure 34 is not a display surface and instead "a protective enclosure" (see para. 0012).

Page 26 of 37

Application. No. 10/820,416

Appeal Brief

In response to Appellants' arguments that Fitzmaurice fails to describe or suggest this

limitation (presented in response to the Office Action mailed April 13, 2009), in the Final Office

Action the Examiner asserted that Fitzmaurice describes this limitation because the reference

discloses that "widgets are placed on the shell or outer edge of a volumetric display" and further

discloses "surface voxels that might be used for part of a 2D widget displayed on the outside surface

of the display inside the enclosure" (Office Action, pages 22 and 23). Appellants submit that these

portions fail to describe or suggest what is recited in Appellants' claim 26. That is, Appellants'

claim 26 specifically recites "a physical spherical display for simultaneously displaying a video

stream and menu information comprising a flat display surface and a convex physical spherical

display surface, wherein the video stream is displayed on the flat display surface and the menu

information is displayed on the outside surface of the convex spherical display surface."

On the other hand, as described above, Fitzmaurice describes a single volumetric display comprising a plurality of voxels placed in layers, and the top layer voxels are used to display widgets,

while others are used to display the scene 12 (see [0027] and FIGS. 6A and 6B). For example, in

FIG. 6B, voxels 102, 104, 108, 110, 112, 114, 116 and 118 "are surface voxels that might be used for

part of a 2D widget displayed" (see Fitzmaurice, [0027] and FIGS. 6A and 6B). Fitzmaurice

explicitly states that a single volumetric display is used to display both the widgets and scenes. This

 $is\ different\ than\ Appellants\ recited\ claim\ limitation, ``a\ physical\ spherical\ display\ for\ simultaneously$

displaying a video stream and menu information comprising a flat display surface and a convex

physical spherical display surface."

Appellants presented arguments similar to the above in response to the Final Office Action.

In the Advisory Action mailed April 5, 2010 the Examiner responded to these arguments stating that

the arguments are not persuasive.

Initially Appellants note that the Examiner does not in fact explicitly respond to the argument with respect to Claim 26 and only refers to Claim 1. Therefore, Appellants herein respond to the

reasoning presented by the Examiner with the assumption that the Examiner may provide the same

reasoning with respect to Claim 26.

In support of maintaining his rejection of Claim 1, the Examiner stated:

"[the] specification of the instant application does not explicitly disclose 'displaying a

Page 27 of 37

Application. No. 10/820,416

Appeal Brief

second content on an outside surface of the physical spherical display surface,' and in fact discloses' simultaneously display[ing] a second content on a spherical display surface within the spherical display' (Abstract). Just as the specification though would nevertheless support a teaching of 'simultaneously displaying a second content on an outside surface of a physical spherical display surface,' so to [sic] would Fitzmaurice's disclosure that '[i]t is an aspect of the present invention to place the widgets on an outside surface of a volumetric display inside a protective enclosure' (paragraph 0012). The volumetric display described by Fitzmaurice can be considered a physical spherical display."

Appellants respectfully disagree with the Examiner's reasons for maintaining the rejection of Claim 26. First, Appellants respectfully submit that the present application does in fact disclose "displaying a second content on an outside surface of a physical spherical display surface". While the Abstract does recite what is cited by the Examiner, the specification clearly describes several embodiments and further expands on different methods and embodiments for managing and presenting content through a spherical display device. For example, the specification specifically recites, "[t]he display area 615 includes a spherical display surface 625 and a flat display surface 620," which are both illustrated in FIG. 6A and 6B included herein for convenience (see Specification as Filed, pg. 16: Ins. 5-21). Furthermore, FIGS. 7A-7D and 8A-8D illustrates different embodiments of the spherical display device, and clearly demonstrate "displaying a second content on an outside surface of a physical spherical display surface".

Furthermore, Appellants assert that the Examiner's assertion that Fitzmaurice's disclosure that "[i]t is an aspect of the present invention to place the widgets on an outside surface of a volumetric display inside a protective enclosure" supports "simultaneously displaying a second content on a outside surface of a physical spherical display surface" is in error. That is, as evidenced by the reasons set out above, Fitzmaurice does not describe "displaying a first content on a flat display surface within a display and simultaneously displaying a second content on a outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex."

Instead, Fitzmaurice discloses a display apparatus 54 that will produce a 3D holographic display. The "volumetric display is comprised of voxels or volume pixels," e.g. voxels 94-120 illustrated in FIG. 6B of Fitzmaurice. Fitzmaurice discloses that the top level voxels or surface voxels are used for displaying widgets "on the outside surface of the display inside the enclosure."

Page 28 of 37

Application. No. 10/820,416

Appeal Brief

while other voxels are used to display the scene (Fitzmaurice, [0027]). As such, both the widgets

and the scene 12 are displayed using the same set of voxels and accordingly on the same display,

"within the volumetric display," wherein the volumetric display does not comprise a physical spherical display, and further does not describe or suggest "a physical spherical display for

simultaneously displaying a video stream and menu information comprising a flat display surface

and a convex physical spherical display surface, wherein the video stream is displayed on the flat

display surface and the menu information is displayed on the outside surface of the convex spherical

display surface" (see Fitzmaurice, [0024]-[0027]).

Furthermore, Appellants submit that regardless of what is recited in the present application or

may be supported by the specification of the present application, Fitzmaurice clearly does not

describe or suggest what is recited in claim 26, and as such fails to render claim 26 obvious.

Therefore, Appellants respectfully submit that the Examiner's reasons for maintaining the rejection

of claim 26 in view of Fitzmaurice are in error.

For the reasons described above, Fitzmaurice fails to describe or suggest "a physical spherical

display for simultaneously displaying a video stream and menu information comprising a flat display surface and a convex physical spherical display surface, wherein the video stream is displayed on the

flat display surface and the menu information is displayed on the outside surface of the convex

spherical display surface" as recited in claim 26.

Furthermore, Minakuchi, Webster, Anderson, Barbieri and Ano also fail to describe or suggest "a physical spherical display for simultaneously displaying a video stream and menu

information comprising a flat display surface and a convex physical spherical display surface,

wherein the video stream is displayed on the flat display surface and the menu information is

displayed on the outside surface of the convex spherical display surface." As such, the above cited

combination fails to render claim 26 obvious, and thus, Appellants respectfully request that the

rejections to claim 26 be withdrawn.

Claims 27, 28 and 40

The remaining Claims 27, 28 and 40 are dependent claims that ultimately depend upon

independent Claim 26. Although other significant points of distinction may be found therein, again,

for the purposes of this appeal the Appellants are content to rely only upon the points raised above.

Issue 9: Claim 43 is patentable under 35 U.S.C. § 103(a)

Claim 43 stands rejected under 35 U.S.C. § 103(a), as being unpatentable over over Minakuchi, Fitzmaurice, Webster, Anderson, Barbieri and Ano and in further view of Bhatia. Appellants respectfully traverse this rejection and submit that the above-cited combination fails to describe or suggest each limitation as recited in Claim 43.

Claim 43 is a dependent claim that ultimately depends upon independent Claim 26.

Although other significant points of distinction may be found therein, again, for the purposes of this appeal the Appellants are content to rely only upon the points raised above.

Issue 10: Claim 44 is patentable under 35 U.S.C. § 103(a)

Claim 44 stands rejected under 35 U.S.C. § 103(a), as being unpatentable over over Minakuchi, Fitzmaurice, Webster, Anderson, Barbieri and Ano and in further view of Brook. Appellants respectfully traverse this rejection and submit that the above-cited combination fails to describe or suggest each limitation as recited in Claim 44.

Claim 44 is a dependent claim that ultimately depends upon independent Claim 26.

Although other significant points of distinction may be found therein, again, for the purposes of this appeal the Appellants are content to rely only upon the points raised above.

(8) Claims Appendix

Provided is a complete listing of all the pending Claims involved with this appeal:

Claim 1: A method comprising:

displaying a first content on a flat display surface within a display;

capturing the first content with a content capturing device;

simultaneously displaying a second content on an outside surface of a physical spherical display surface of the display, wherein the spherical display surface is convex; and

scrolling through one of the first content and the second content based on instructions while displaying the other one of the first content and the second content.

wherein the spherical display surface is imposed over the flat display surface such that the first content and the second content are distinctly and simultaneously viewed.

Claim 2: The method according to claim 1 further comprising storing the first content and the second content in a storage device.

Claim 3: Cancelled

Claim 4: The method according to claim 1 wherein the content capturing device is a video camera.

Claim 5: The method according to claim 1 wherein the content capturing device is a digital camera.

Claim 6: The method according to claim 1 wherein the second content is one of a video stream and digital image.

Page 31 of 37

Application, No. 10/820,416

Appeal Brief

Claim 7: The method, according to claim 1 wherein the instructions are based on rotating

a playback ring to scroll through one of the first content and the second content.

Claim 8: The method according to claim 1 wherein the instructions are based on rotating

a knob to scroll through one of the first content and the second content.

Claim 9: The method according to claim 1 wherein the second content comprises content

menu information.

Claim 10: The method according to claim 1 wherein the physical spherical display

surface displays the second content in a three dimensional viewpoint.

Claim 11: A system comprising:

means for displaying a first content on a flat display surface within a display;

means for capturing the first content;

means for simultaneously displaying a second content on an outside surface of a physical

spherical display surface of the display, wherein the spherical display surface is convex; and

means for scrolling through one of the first content and the second content based on

instructions while displaying the other one of the first content and the second content.

wherein the spherical display surface is imposed over the flat display surface such that the

first content and the second content are distinctly and simultaneously viewed.

Claims 12-25: Cancelled

Claim 26: A device, comprising:

a content capturing device for capturing first content;

a physical spherical display for simultaneously displaying a video stream and menu

information comprising a flat display surface and a convex physical spherical display surface,

Page 32 of 37

Application. No. 10/820,416

Appeal Brief

wherein the video stream is displayed on the flat display surface and the menu information is displayed on the outside surface of the convex spherical display surface;

a playback ring for scrolling through the menu information; and

a storage module to store the video stream and the menu information.

Claim 27: The device according to claim 26 wherein the spherical display shows the menu information with a three dimensional effect to distinguish from the video stream.

Claim 28: The device according to claim 26 wherein the menu information is shown overlaid on top of the video stream.

Claim 29: Cancelled

Claim 30: The method according to claim 1 wherein the display is semi-spherically shaped and wherein the spherical display surface substantially spans the semi-spherical shape of the spherical display and the flat display surface is coupled to the physical spherical display surface and spans a diameter of the physical spherical display surface.

Claim 31: Cancelled

Claim 32: The method according to claim 1 wherein the scrolling further comprises controlling at least one of a direction and speed of a playback of one of the first content and the second content.

Claim 33: The method according to claim 1 wherein the physical spherical display is configured to simultaneously display multiple video feeds.

Claim 34: The method according to claim 1 wherein the physical spherical display is configured to apply special effects to a portion of the first content, wherein the special effects

comprises at least one of sepia tone, black and white tone and slow shutter effect.

Claim 35: The system according to claim 11 wherein the display spherical surface is

semi-spherically shaped and wherein the spherical display surface substantially spans the semi-

spherical shape of the physical spherical display and the flat display surface is coupled to the

physical spherical display surface and spans a diameter of the physical spherical display surface.

Claim 36: Cancelled

Claim 37: The system according to claim 11 wherein the means for scrolling is further

configured to control at least one of a direction and speed of the playback of the one of the first

content and the second content.

Claim 38: The system according to claim 11 wherein the physical spherical display is

configured to simultaneously display multiple video feeds.

Claim 39: The system according to claim 11 wherein the means for simultaneously

displaying the second content is further configured to apply special effects to a portion of the first

content, wherein the special effects comprises at least one of sepia tone, black and white tone and

slow shutter effect.

Claim 40: The device according to claim 26 wherein the spherical display surface is

semi-spherically shaped and wherein the convex spherical display surface substantially spans the semi-spherical shape of the physical spherical display and the flat display surface is coupled to

the spherical display surface and spans a diameter of the physical spherical display.

Claim 41: Cancelled

Page 34 of 37

Application. No. 10/820,416

Appeal Brief

Claim 42: The device according to claim 26 wherein the playback ring is further configured to control at least one of a direction and speed of the playback of the video stream.

Claim 43: The device according to claim 26 wherein the physical display is configured to

simultaneously display multiple video streams.

Claim 44: The method according to claim 26 wherein the physical spherical display is

configured to apply special effects to a portion of the video stream, wherein the special effects

comprises at least one of sepia tone, black and white tone and slow shutter effect.

Page 35 of 37

Application. No. 10/820,416

Appeal Brief

(9) Evidence Appendix

None

Page 36 of 37 Application. No. 10/820,416 Appeal Brief

(10) Related Proceedings Appendix

None

Page 37 of 37 Application. No. 10/820,416 Appeal Brief

CONCLUSION

Appellants submit that the rejections of the pending Claims 1, 2, 4-11, 26-28, 30, 32-35, 37-40 and 42-44 are in error, and that Claims 1, 2, 4-11, 26-28, 30, 32-35, 37-40 and 42-44 are patentable over the applied combinations of references.

Appellants respectfully request a reversal of the final rejection.

Dated: June 7, 2010 Respectfully submitted,

/ThomasFLebens38221/

Thomas F. Lebens Reg. No. 38,221 Attorney for Appellants

Address all correspondence to: FITCH, EVEN, TABIN & FLANNERY Thomas F. Lebens 120 South LaSalle Street, Ste. 1600 Chicago, II. 60603 (858) 587-7644

81488appealbrief.001.doc